Connecting T3/E3 Network Modules

This chapter describes how to connect T3/E3 network modules for modular access routers and contains the following sections:

- 1-Port T3/E3 Network Modules, page 20-2
- Connecting T3/E3 Network Modules to the Network, page 20-2
- T3/E3 Network Modules LEDs, page 20-4
- Related Documents, page 20-5

The NM-1T3/E3 is a single port universal T3/E3 network module with integrated CSU/DSU, clear channel, and subrate support. Channels on the network module can be configured as either T3 or E3 through Cisco IOS software.

Note The NM-1T3/E3 provides subrate T3 support for Digital Link, Kentrox, Larscom, Verilink, and Adtran. The NM-1T3/E3 also provides subrate E3 support for Digital Link and Kentrox.

Online insertion and removal (OIR) is supported on the network module when installed in one of the following platforms:

- Cisco 3660
- Cisco 3745

Tip Refer to the platform hardware installation guides for OIR information for these platforms (see the "Related Documents" section on page 20-5).

The 1-port T3/E3 network module is supported on the following platforms:

- Cisco 265*x* XM
- Cisco 2691
- Cisco 3660
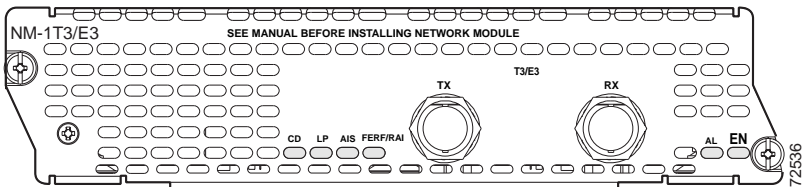- Cisco 3725
- Cisco 3745
- Cisco MWR 1941-DC

Tip   For information about additional network modules supported on a specific platform, see Chapter 1, "Overview of Cisco Network Modules for Cisco Access Routers."

1-Port T3/E3 Network Modules

This section provides information on the following network modules for Cisco modular and the Cisco MWR 1941-DC routers:

- 1-port T3/E3 network modules (see Figure 20-1)

Figure 20-1   1-Port T3/E3 Network Module Faceplate

Connecting T3/E3 Network Modules to the Network

To connect a T3/E3 network module to the network, use a 75-ohm 728-A coaxial cable to connect the BNC connector on the network module to a networking device (see Figure 20-2).

Warning   **This equipment contains a ring signal generator (ringer), which is a source of hazardous voltage. Do not touch the RJ-11 (phone) port wires (conductors), the conductors of a cable connected to the RJ-11 port, or the associated circuit-board when the ringer is active. The ringer is activated by an incoming call.** Statement 1042
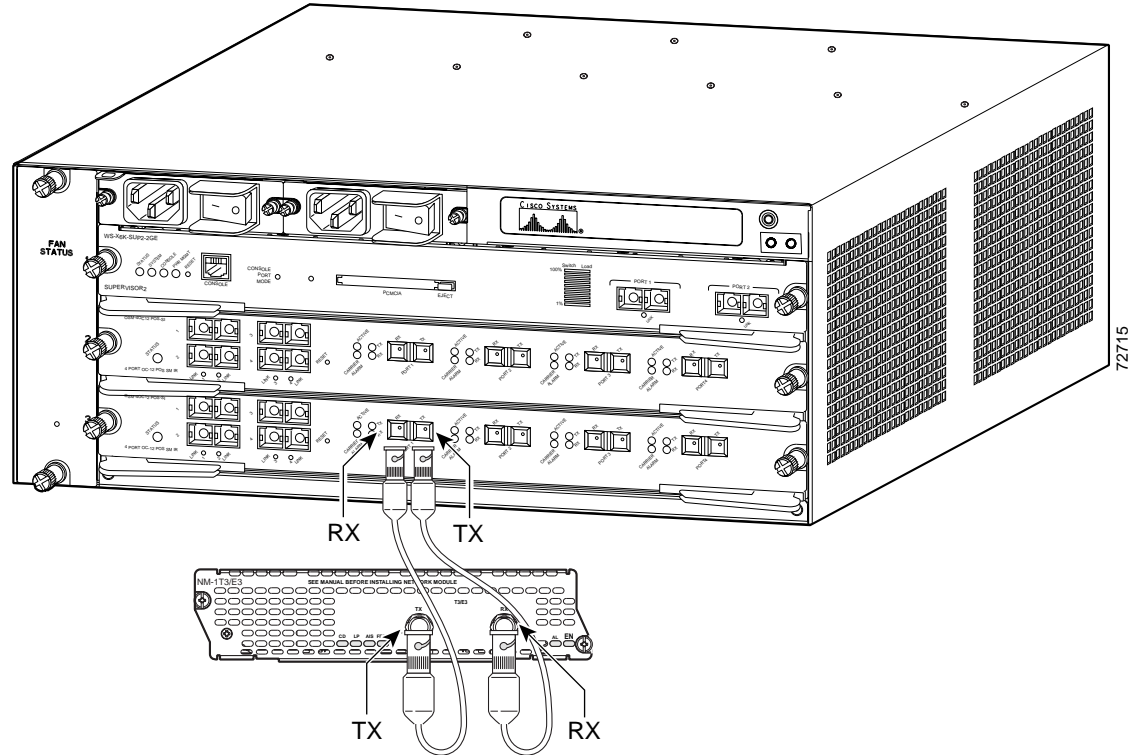
Warning   **If the symbol of suitability with an overlaid cross appears above a port, you must not connect the port to a public network that follows the European Union standards. Connecting the port to this type of public network can cause severe injury or damage your router.** Statement 1031

Caution   To minimize transient surges, the internal wiring should not be routed in the same conduit with power lines or external telephone lines.

Figure 20-2   Connecting a T3/E3 Network Module to a Networking Device (Cisco 7603 router shown)

Tip   When connecting the T3/E3 network module to a port adapter used in another router series, verify that you are connecting the TX port on the network module with the RX port on the port adapter, and the TX port on the port adapter to the RX port on the network module.

T3/E3 Network Modules LEDs

All network modules have an enable (EN) LED. This LED indicates that the module has passed its self-tests and is available to the router. See Figure 20-3 and Table 20-1 for LEDs on the T3/E3 network module.
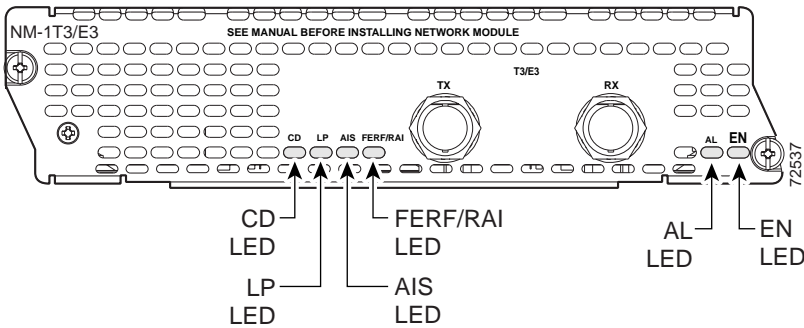
Figure 20-3   T3/E3 LEDs

Table 20-1   T3/E3 Network Module LEDs

LED	Meaning
CD	Green indicates that a signal is present on the port.
LP	Yellow indicates that a loopback condition is present on the port.
AIS	Yellow indicates an alarm on the DS3 transmission.
FERF/RAI	Yellow indicates a remote failure at the far end of the connection.
AL	Yellow indicates that the port is out-of-frame.
EN	Green indicates that the network module has passed self-test and is available to the router.

Related Documents

For additional information, refer to the following documents.

Tip For information on obtaining documentation, see the "Obtaining Documentation" section on page xxi. For information on obtaining technical assistance, see the "Obtaining Technical Assistance" section on page xxii.

Platform Documentation

For the Cisco 2600 series, refer to documents listed under *Cisco 2600 Series Routers*.

For the Cisco 3600 series, refer to documents listed under *Cisco 3600 Series Routers*.

For the Cisco 3700 series, refer to documents listed under *Cisco 3700 Series Routers*.

For the Cisco MWR 1941-DC, refer to documents listed under *Cisco MWR 1941-DC Mobile Wireless Edge Router.*

Cisco IOS Software Documentation

For information on Cisco IOS Release 12.2(11)YT, refer to documents listed under *Cisco IOS Release 12.2(11)YT.*

For information on Cisco IOS software features specific to the T3/E3 network module, refer to the *Clear Channel T3/E3 Network Module with Integrated CSU/DSU* document.

Related Documents